

REMARKS

By this Amendment, Applicants amend claims 1, 6, 9, 10, 14, and 19 to more appropriately define the invention and add new claim 21. Claims 1-4, 6-14, and 16-21 are currently pending.

In the Final Office Action, the Examiner objected to the Abstract and Title. Further, the Examiner rejected claims 1-4, 6-14, and 16-20 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 6,084,989 (hereinafter, "Eppler"). The Examiner also objected to claims 1-20 according to the Office Action Summary. However, in the Response to Amendment, the Examiner stated that the "double patenting rejection is removed." See Final Office Action, pg. 3.

OBJECTION TO THE ABSTRACT AND TITLE

Applicants disagree with the Examiner's contention that correction is required in the Abstract and Title under M.P.E.P. § 608.01(b). However, in order to expedite prosecution of the present application, the Abstract and Title have been amended. The amended Abstract and Title contain no new matter and accordingly, Applicants respectfully request the Examiner to withdraw the objection to the Abstract and Title.

35 U.S.C. § 102(b)

The rejection of claims 1-4, 6-14, and 16-20 is respectfully traversed for the following reasons.

Anticipation under 35 U.S.C. § 102 requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. To establish inherency, the Office must show that the missing descriptive

matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill in the relevant art.

Eppler discloses a system and method for determining offset values between a digitized image taken from an imaging system, for example, a spacecraft or satellite, and similar images stored in a database. The offset values are used to “adjust the optical line of sight of the imaging system” on the spacecraft. (Eppler, col. 1, lns. 60-61).

Specifically, a portion or patch of the digitized image from the imaging system is compared to a similar image stored in the database. In order to increase accuracy, the patch contains a landmark, such as an island or lake, so that values can be compared to the same landmark taken from the image stored in the database. “[O]nly islands and lakes are used as landmarks. This is due to the large difference in gray-scale values between land and water. They also have the important characteristic that they are closed features embedded in a homogenous surround.” (Eppler, col. 16, ll. 9-10.).

Eppler computes off-set values based upon the differences between the image taken from the imaging system (i.e., what the satellite or spacecraft is currently imaging) and the image stored in the database (i.e., the desired appearance of the image). Prediction values, or coefficients, are determined based upon the off-set values. The prediction values are associated with the predicted orbit and attitude of the spacecraft or satellite taking the images. The prediction values are used by systems located on the spacecraft or satellite (e.g., the orbit and attitude prediction system 13 and the image motion compensation system 14) to create pointing commands. The pointing commands change the line of sight of the imaging system in order to take an image

consistent with the desired image. (See Eppler, Fig. 1 and col. 3, ln. 41 through col. 5, ln. 36).

Therefore, the purpose of Eppler is to compare an image from the imaging system against a desired image so that the differences in the two images can be used to adjust the optical line of sight of the imaging system. Eppler allows the comparison to be done with subpixel accuracy and under different diurnal and seasonal conditions. (See Eppler, col. 1, ll. 43-62).

On page 4 of the Final Office Action, the Examiner alleges that “when assigning points on the two similar maps, it is very obvious that the coordinates and parameters are [sic] must have the same values.” Applicants respectfully disagree with the Examiner. In addition, even if the coordinates and parameters must have the same values when assigning points on two similar maps, Eppler does not create a mathematical georeferencing function so that appropriate geographic coordinates may be assigned to other image pixels using the mathematical georeferencing function. The imaging system image contains only line and pixel values. Although, the image stored in the database does contain other geodetic information, that information is never assigned to the imaging system image. Nor, is the geodetic information in the database used in any way to create a mathematical georeferencing function that will assign geographic coordinates to pixels on the imaging system image. In fact, the image taken from the satellite is never stored with any new information and the image is no longer needed once the optical line of sight has been corrected. Therefore, each and every element of independent claim 1 is not disclosed by Eppler, including at least “creating a

mathematical georeferencing function for assigning appropriate geographic coordinates to any one of the plurality of pixel locations." (See claim 1).

Further, as noted above, the Examiner alleged that "[w]hen assigning points on the two similar maps, it is very obvious that the coordinates and parameters are [sic] must have the same values. . . ." (Office Action, pg. 4; emphasis added). Applicants submit that this reason for rejection under § 102(b) is not appropriate. The Examiner's statement is an unsubstantiated generalization of questionable relevance to Applicants' claims. To the extent the Examiner is relying on "official notice" or facts that are "common knowledge," the law is clear as to the obligations of the Examiner. Applicants refer the Examiner to the February 21, 2002, Memorandum from USPTO Deputy Commissioner for Patent Examination Policy, Stephen G. Kunin, regarding "Procedures for Relying on Facts Which are Not of Record as Common Knowledge or for Taking Official Notice." In relevant part, the Memorandum states, "If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding" (Memorandum, p. 3). Applicants submit that the Examiner made a generalized statement regarding Applicants' claim 1 without any documentary evidence to support it. Applicants traverse the Examiner's presumed taking of "Official Notice," noting the impropriety of this action, as the Federal Circuit has "criticized the USPTO's reliance on 'basic knowledge' or 'common sense' to support an obviousness rejection, where there was no evidentiary support in the record for such a finding." *Id.* at 1. Applicants submit that "[d]eficiencies of the cited references cannot be remedied by the Board's general conclusions about what is "basic knowledge" or

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"common sense." *In re Lee*, 61 USPQ2d 1430, 1432-1433 (Fed. Cir. 2002), quoting *In re Zurko*, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Should the Examiner maintain the rejection after considering the arguments presented herein, Applicants submit that the Examiner must provide "the explicit basis on which the examiner regards the matter as subject to official notice and [allow Applicants] to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made" (*Id.* at 3, emphasis in original), or else withdraw the rejection.

Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 1.

Similarly, since independent claims 14 and 19 contain similar recitations as independent claim 1, but are directed to an apparatus and a computer readable medium, respectively, Applicants respectfully request the Examiner to withdraw the rejection to these claims based on the reasons set forth for independent claim 1.

In addition, Applicants respectfully request the Examiner to withdraw the rejection to dependent claims 2-4, 6-13, 16-18, and 20 based, at least, upon the allowable subject matter as recited in the respective independent claims from which they directly or indirectly depend.

Further, Applicants respectfully request the allowance of new claim 21, which is indirectly dependent upon allowable independent claim 1.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1-4, 6-14, and 16-20 in condition for allowance.

Applicants submit that the proposed amendments of claims 1, 14, and 19 do not raise new issues or necessitate the undertaking of any additional search of the art by the

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Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment should allow for immediate action by the Examiner.

Furthermore, Applicants respectfully point out that the final action by the Examiner presented some new arguments as to the application of the art against Applicant's invention. It is respectfully submitted that the entering of the Amendment would allow the Applicants to reply to the final rejections and place the application in condition for allowance.

Finally, Applicants submit that the entry of the amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

In view of the foregoing remarks, Applicants submit that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicants therefore request the entry of this Amendment, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

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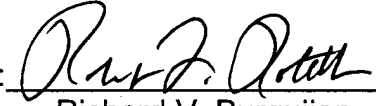

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Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: September 4, 2003

By:  Reg 24,014
Richard V. Burgujian
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Attachment: Clean Version of the Abstract

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